

ITC Midwest Response to Staff Review Letter Dated September 9, 2016
Docket No. E-20994, AM 20
Prairie Creek 4750 Rebuild
Linn County

1. Petition

- a. Revised name as indicated.
- b. No revision necessary please see comments below.
- c. No updates at this time.

2. Exhibit A

- a. No revision necessary please see comments below.
- b. The following revisions have been made:
 - 1. Revised as indicated.
 - 2. Revised as indicated.
 - 3. Revised as indicated.
 - 4. Revised as indicated.
 - 5. Revised to CIPCO Prairie Creek Substation.
- c. The following revisions have been made:
 - 1. Revised to east corporate city limits of Cedar Rapids.
 - 2. Range 6 west is correct, revised Exhibit B to be consistent.
 - 3. Revised as indicated.
- d. Added east end point and terminus.
- e. The following revisions have been made:
 - 1. Revised as indicated.
 - 2. Revised as indicated.
 - 3. Revised as indicated.
 - 4. Revised to indicate point is located on private property.
- f. The following revisions have been made:
 - 1. Revised to indicate east-west dimension.
 - 2. No revision necessary to Exhibit A, revised Exhibit B to be more consistent with Exhibit A.
- g. The following revisions have been made:
 - 1. Indicated line segment also crosses through the East Half of the Southwest Quarter.
 - 2. No revision necessary to Exhibit A, revised Exhibit B to be more consistent with Exhibit A.
- h. No revision necessary to Exhibit A, revised Exhibit B to be more consistent with Exhibit A.
- i. The following revisions have been made:
 - 1. Removed reference to Indian Creek, since Indian Creek is within the corporate limits of Cedar Rapids.
 - 2. Revised to east corporate city limit line.
- j. No revision necessary please see comments above.

3. Exhibit B

- a. Revised Ranges.
- b. The following revisions have been made:
 - 1. Revised line symbol to be consistent with legend.
 - 2. Revised Exhibit B to be more consistent with Exhibit A.
 - 3. Revised legend and map to include additional symbol for single circuit 69kV line.
- c. The following revisions have been made:
 - 1. Revised legend and map to include additional symbol for single circuit 69kV line.
 - 2. Revised as indicated.
- d. The following revisions have been made:
 - 1. Removed line and callout, addressed with new line symbol in legend.
 - 2. Removed "tbdc" as indicated.
 - 3. Revised as indicated.
 - 4. Revised location of 161 kV line.
- e. The following revisions have been made:
 - 1. Added line callout.
 - 2. Yes, added addition line callout for clarity.
- f. The following revisions have been made:
 - 1. Revised line segment in Exhibit B map to show at a southeasterly angle.
 - 2. A drawing has been provided which shows the 115 kV crossing.
- g. The following revisions have been made:
 - 1. No revision necessary to Exhibit B, removed reference to Indian Creek in Exhibit A.
 - 2. Revised to show double circuit line crossing over our proposed double circuit line as indicated.
- h. No revision necessary, road name matches IDOT map.
- i. The following revisions have been made:
 - 1. Revised Company name as indicated.
 - 2. Revised address for Southwestco Wireless LP.

NOTE: Because of the numerous changes made to the "Exhibit C Attachments" file, please disregard the previous "Exhibit C Attachments" file and replace it with the newly filed "Exhibit C Attachments" file.

4. Exhibit C – Segment 1 of 4

- a. Revised as indicated.
- b. Revised to R7W and R6W.
- c. Revised to indicate the diameter as 0.555".
- d. After review, it appears that in the original submittal the Hubbell catalog numbers of the tangent and angle insulators were mistakenly reversed. The post insulator will be P250034S1020. The middle insulator representing the one used on the angle structure will be P25S0034S9020. New drawings have been provided which more accurately represent the tangent and angle structures to be used for the double circuit portion of this line. Insulator P250034S1020 corresponds with

structure drawing JJ0TGVMW and insulator P25S0034S9020 corresponds with structure drawing JJ0AMGMW.

- e. Revised to say "This Docket (Northern Circuit)".
- f. The second circuit of this line will never operate at a voltage other than 34.5 kV. The line will be built using insulators rated for 69 kV, but will be retired once it is no longer needed to serve the existing 34.5 kV system and will not be converted to 69 kV operation. Line 33 is correct as it is and was not revised.
- g. Existing conductor will be transferred.
- h. See response to item 4.d. above.
- i. The following revisions have been made:
 - 1. Vertical dimensions are provided between the top bolt of each insulator. The insulator up-sweep angle is 12 degrees, with a total up-sweep distance of about 9.6". Since all insulators are the same, phase to phase clearance is correct at 7'-0". The vertical distance to the shield wire attachment is within inches of the 11.5' dimension, the same with the dimension down to the distribution attachment point. A "+/-" has been added to that dimension to indicate that it is approximate.
 - 2. The unknown horizontal dimensions are no longer shown on the new drawing.
 - 3. The phase to ground clearance along the horizontal post insulator has been added. .
 - 4. See responses to 4.d. and 4.h.
- j. The following revisions have been made:
 - 1. Vertical dimension to the underbuild mounting position has been indicated at 9 feet.
 - 2. See responses to 4.d. and 4.h.
 - 3. The phase to ground clearance along the horizontal post insulator has been added.
 - 4. The dimension from shield wire to top of pole has been added.
 - 5. The dimension arrow was there in error and has been removed.
- k. The following revisions have been made:
 - 1. Vertical dimension to the underbuild mounting position has been indicated at 9 feet.
 - 2. The phase to ground clearance has been added.
 - 3. The post insulators to be used on most of the structures on this line are longer than normal to allow horizontal phase-to-phase spacing between the two circuits. For this particular structure, the additional phase-to-phase spacing is not needed because of the structure configuration and because the line will transition to single circuit east of this structure, which uses shorter insulators.

5. Exhibit C – Segment 2 of 4

- a. The following revisions have been made:
 - 1. Range 5W revised to Range 6W.
 - 2. Line 5 revised to "will be built".
- b. The following revisions have been made:

1. An updated drawing has been provided with a clearer 46.8" dimension.
2. The updated drawing removed the vertical spacing dimension between levels of underbuild.
- c. Three one way switches will be installed on separate poles, all owned by CIPCO. A drawing has been provided showing the switch structure that will be used for the three switches.
- d. The revised version of drawing 69D2V3 does not contain a reference to lower distribution arm mounting position. Drawing 25UCF30 is correct.

6. Exhibit C – Segment 3 of 4

- a. Revised to R6W.
- b. Revised to say "will be rebuilt".
- c. The middle column of lines 16-22 was removed. There will not be an angle structure on this segment.
- d. Line 61 revised to indicate that there will not be angle structures on this segment.
- e. An updated drawing has been provided with a clearer 46.8" dimension.
- f. A drawing has been provided which shows the 115 kV crossing.

7. Exhibit C – Segment 4 of 4

- a. The following revisions have been made:
 1. Range 5W revised to Range 6W.
 2. Line 5 revised to "will be built".
- b. Original span lengths were typical and maximum to the entire 161 kV line. Revised to indicate that for this short section, the typical and maximum span length is 300 feet.
- c. Existing conductor will be used for this segment.
- d. The 161 kV line is part of the docket number being amended, E-20994. It is represented by Exhibit C 41.3. Line 32 was revised to specify E-20994.
- e. No manufacturer information is readily available on the exact stranding of ACSR/SD conductors. The conductor used in this case is 954 Rail Type 7. In the absence of exact information on the layers of the conductor, stranding was revised to "DS Type 7".
- f. Per the attached insulator cut sheet, lines 44 and 45, 3rd column from the left are correct at 900 kV for the critical impulse flashover. Lines 44 and 45 not revised.
- g. Line 61 revised to indicate that there are no angle structures.
- h. Line 62 revised to indicate that there are no deadend structures.
- i. The following revisions have been made:
 1. A vertical dimension has been provided between the two circuits.
 2. Conductor labels not revised. ITC Midwest does not agree that making the requested changes would increase clarity, nor are they needed to be able to easily identify that the conductors shown on the drawing are the same as the ones listed in the written portion of the Exhibit C document.
- j. The following revisions have been made:
 1. Revised to indicate that the lower detail is for 69 kV.
 2. Conductor labels not revised. ITC Midwest does not agree that making the requested changes would increase clarity, nor are they needed to be able

to easily identify that the conductors shown on the drawing are the same as the ones listed in the written portion of the Exhibit C document.

3. Phase to ground dimension has been added.
4. The manufacturer and catalog number have been added to the drawing.

8. Exhibit D

- a. The following revisions have been made:
 1. Misspelling of the word “nominal” has been revised.
 2. Date has been corrected.
 3. Company name has been revised.
- b. The following revisions have been made:
 1. Page number has been corrected.
 2. Revised as indicated.
 3. Revised as indicated.
 4. The section, township, and range of the Mt. Vernon were verified to be correct. No revision necessary.
 5. Revised as indicated.
 6. Revised as indicated.
- c. The following revisions have been made:
 1. Misspelling of the words “Parallel” and “Prairie” have been revised.
 2. Revised as indicated.
- d. Revised as suggested.

9. Exhibit F

- a. Company name has been revised.
- b. The following revisions have been made:
 1. Revised company name and address.
 2. A copy of the notification letter sent to the new address has been attached.